AMENDMENTS TO THE DRAWINGS

The attached sheet of drawings includes changes to Fig. 14. This sheet, which includes Fig. 14, replaces the original sheet including Fig. 14. Figure 14 has been labeled as "Prior Art".

Attachment: Replacement Sheet(s)
Annotated Sheet Showing Changes

REMARKS

Reconsideration of this application is respectfully requested.

The request that Figure 14 be labeled as prior art has been complied with by an appropriate revision of that figure.

The rejection of claims 1-6 for lack of an enabling disclosure is traversed. Contrary to the rejection, a housing second filter header cap are not essential to the operation of the invention. Blood will be filtered if it passes through an inlet filter head cap and into a bundle of hollow fibers. The filtering occurs as filtrate seeps out through the sides of the filter fibers and the blood passes through the fibers. While the filter may be more practical if it has both a housing and an end filter cap, the practicality of the invention is not a factor in determining essential elements. The rejection should be withdrawn because the claimed filter will function with simply a filter header cap and bundle of hollow fibers.

The rejection of claims 7 and 15 as lacking an enabling disclosure is traversed for the same reasons as stated above for traversing the enablement rejection of claims 1-6.

The rejection of claims 3-4 and 8 as being indefinite has been overcome by amendment. In particular, claims 3, 4 and 8 have been revised to make clear that the rim either has a width no greater than 0.508 mm or has an average width in a range of 0.025 mm to 0.508 mm.

The rejection of claims 1, 2, 5 and 6 as being anticipated by Spranger et al (USP 4,990,251) is traversed. Claim 1 has been amended to require the filter cap to have a tapered inside side surface that abuts the fiber bundle.

There is no anticipation of claim 1 because Spranger et al do not teach a filter header cap that has a tapered inside side surface to seal around a bundle of hollow fibers. The filter header cap disclosed in Spranger et al is sealed to the outer housing and not to the bundle of hollow

fibers. Spranger et al shows a sealing ring (17) and a wall (3) of potting material disposed between the filter cap and bundle of fibers. Spranger et al. teach directly away from the claimed invention in which the filter header cap is sealed to a side surface of an end section of a bundle of hollow fibers.

With respect to claim 5, there is no anticipation because Spranger et al. do not show a stem of a bundle extending outwardly from the potting material. Contrary to the Action, the ends of the fibers shown in Spranger et al are coplanar with the potting material wall (3).

The rejection of claims 1, 2, 5 and 6 as being anticipated by Patterson et al. (USP 6,387,324) has been overcome by amendment. In particular, claim 1 has been amended to require the bundle of hollow fibers to abut a tapered inside side surface of the header gap. In contrast, Patterson et al. disclose at Figure 3 a filter header cap having a cylindrical (not-tapered) inside surface. In Patterson et al, the filter header cap (76) abuts an end of the filter tube (72). The non-tapered inside surface of the header cap (76) fits over the ends of the bundle of fibers (80). Without a tapered inside surface, it is unlikely that the fiber bundle in Patterson et al. abuts the sides of the bundle. Accordingly, Patterson et al do not anticipate the claims of this application.

The rejection of claims 3 and 4 over Spranger et al. is traversed for substantially the same reasons as stated above, with respect to independent claim 1. Further, Spranger et al do not teach rim of potting material that is not greater than 0.508 mm. Spranger et al teach including a wall of potting material between the hollow fiber bundle and filter cap. This wall of potting material provides a seat for an O-ring or new-ring (17). The O-ring has a diameter which appears to be substantially greater than 0.5 mm. In the examples disclosed in Spranger et al, the "deformation" of the O-ring appears to be greater than 0.8 mm. Similarly, the "deformation" of the new ring

disclosed in Spranger et al appears to be at least 0.45 mm. The diameter of the O-rings would be substantially greater than its deformation. It is submitted that the actual deformation of the O-ring or new ring disclosed in Spranger et al. is substantially greater than the range of deformations shown in Figure 5 of Spranger et al. Because the diameters of the O-ring and new rings in Spranger et al is substantially about the size of the width of the annular ring of potting material, it appears that the annular ring of potting material shown in Spranger et al is substantially greater than 0.508 mm which is recited in this application. Moreover, because the potting material ring disclosed in Spranger et al provides a seat for either o-ring or new ring, the width of the potting material must be substantially greater than 0.508 mm to provide that seat. It would not have been obvious to modify Spranger et al so as to do away with the new ring or O-ring and thereby the need for a wide seat provided by the annular ring of potting material.

The Action is incorrect in stating that it is a mere matter of optimization the width of the wall of potting material in which would motivate a person of ordinary skill in the art to reduce the width of the potting material shown in Spranger et al to below 0.508 mm as is recited in the current application. Because Spranger et al.. teaches away from a narrow rim of potting material for an end section of the bundle of hollow fibers, Spranger et al does not render obvious the invention recited in claims 3 and 4 of the present application.

All claims are in good condition for allowance. If any small matter remains outstanding, the Examiner is requested to telephone applicants' attorney. Prompt reconsideration and allowance of this application is requested.

Respectfully submitted,

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